

Application No. 10-068,788
Amendment "C" dated December 10, 2004
Reply to Office Action mailed August 12, 2004

REMARKS

Applicant and Applicant's attorney express appreciation to the Examiner for the courtesies extended during the recent interview held on December 1, 2004. Reconsideration and allowance of the above-identified application are now respectfully requested. Claims 1-11, 13-19, 21-24 and 26-43 are pending, wherein claims 1, 15, 23 and 43 have been amended.

I. CLAIM AMENDMENTS

During the Examiner Interview it was suggested that the ratio of distance "D" to length "L" in the claims was too broad and not sufficiently limited since there were no absolute limitations on the value of either "D" or "L". In view of this, Applicant has amended each of the independent claims to specify a minimum fiber length (or fiber length range), a minimum fiber diameter (or diameter range), and also a minimum length "L" (or a range of length "L"). Support for the fiber length and diameter ranges and minima is found at page 49, line 21 – page 50, line 14 of the Application.

The minima or range values for length "L" are based on the values given for fiber length in view of the fact that, in one embodiment, the fibers can be attached to and extend perpendicularly from the rim. In such cases, the length "L" will essentially equal the fiber length. See original claims 2 and 3. Therefore, if the fibers have a length in a range of about 0.2-5 mm, for example, it follows that the length "L" that such fibers extend beyond the rim will also be in a range of about 0.2-5 mm when perpendicular to the rim. Providing specific ranges or minima for length "L" provides a definitive numeric starting point from which the minimum distance "D" can be immediately derived (e.g., if length "L" has a minimum value of about 0.2 mm, it follows that the distance "D" would have a minimum value of about 0.6 mm if the distance "D" is at least about three times the length "L"). In view of the foregoing, Applicant submits that the Examiner's first concern has been addressed.

The second concern was providing a clearer definition of the rim, particularly with respect to its location at the distal end of the hollow body, in order to provide a more definitive location with which to measure the length "L" and the distance "D". By specifying that the distal delivery end terminates with both an exit orifice and a rim surrounding the exit orifice, the claims more explicitly define where one is to begin measuring the length "L" and the distance "D" in order to determine the ratio of distance "D" to length "L". On the other hand, if the distal

Application No. 10/068,788
Amendment "C" dated December 9, 2004
Reply to Office Action mailed August 12, 2004

delivery end of a delivery device failed to terminate with both an exit orifice and a rim surrounding the exit orifice, that device would fail to have a "rim" as defined in the claims. Without a "rim" it is impossible to determine the distance "D", the length "L" and the ratio of distance "D" to length "L".

II. ADVANTAGES PROVIDED BY CLAIMED INVENTION

The present application specifically identifies the greatly improved nature of the claimed delivery devices. As set forth in the Application, providing a delivery device in which the distance "D" by which the fibers extend up the body wall is at least about three times the length "L" by which the fibers extend from the rim at the distal end greatly enhances the ability to simultaneously deliver and spread a dental composition at the most remote point within the dental preparation and also along the interior wall surfaces of the preparation. Page 9, lines 16-19. "On the other hand, delivery [devices] that do not feature such wall-mounted fibers extending such a distance "D" along the outer wall must be awkwardly maneuvered in order to enable the fibers to adequately touch the interior walls in a manner so as to coat the walls with the dental composition." Application, page 9, lines 21-24 (emphasis added). This teaching in the application, because it remains unchallenged by contrary evidence, constitutes uncontroverted evidence of the important benefits that are obtained using the delivery devices as defined in the claims.

III. DIFFERENCES BETWEEN THE CLAIMS AND THE CITED ART

It is undisputed that Dragan neither teaches nor suggests delivery devices having fibers that extend a distance "D" along the body wall, a length "L" beyond the rim, and wherein the ratio of distance "D" is at least two and one half times the length "L". The fact that each of the independent claims has now been amended to claim that "the distance 'D' is at least about three times greater than the length 'L'" further distinguishes the claims from Dragan.

Moreover, the claims have now been amended to recite either a range or a minimum value for both the fiber length and fiber diameter. As set forth in the application, certain fiber lengths and diameters are especially suitable for delivering less viscous dental compositions to a dental preparation, such as sealants, while other fiber lengths and diameters are especially suitable for delivering more viscous dental compositions, such as impression materials.

Application No. 10/068,758
Amendment "C" dated December 10, 2004
Reply to Office Action mailed August 12, 2004

Application, page 49, line 21 – page 50, line 7. The fiber length and diameter ranges recited in independent claim 1 correspond to fibers that render the delivery device more suitable for delivery of lower viscosity compositions, while the ranges recited in independent claim 14 correspond to fibers that render the delivery device more suitable for delivery of higher viscosity compositions.

Dragan teaches nothing with respect to selecting a suitable fiber length and fiber diameter for delivering dental compositions. Therefore, the independent claims further distinguish over Dragan for this additional reason. Dragan is likewise silent with respect to selecting fibers with lengths and diameters that are best suited for delivering dental compositions having different viscosities. Claims 1 and 14 further distinguish over Dragan since they recite the preferred ranges that relate to the delivery of lower and higher viscosity dental materials, respectively.

Finally, Dragan is silent with respect to the actual length "L" that the fibers extend beyond the rim. Because each of the independent claims recites either a range or a minimum length "L", the independent claims further distinguish over Dragan for yet this additional reason.

Green is similarly deficient in that it neither teaches nor suggests any desirable, let alone preferred, values for fiber length, fiber diameter and the length "L" that the fibers are to extend beyond the "rim". In fact, because Green discloses a delivery device in which the distal end does not terminate with both an exit orifice and a rim surrounding the exit orifice, Green fails to disclose a device having a "rim". Because the Green device has no structure corresponding to the "rim" as now recited in the claims, there is no way to determine the length "L" that the alleged fibers extend beyond this non-existent rim. Therefore, the length "L" of the Green device is indeterminate. Because there is no rim, the distance "D" is likewise indeterminate since there must be a "rim" to provide a starting point for measuring both the length "L" and the distance "D". Because distance "D" and length "L" are both indeterminate, it follows that the ratio of distance "D" to length "L" is likewise indeterminate.

Beyond the fact that both the length "L" and the distance "D" are indeterminate, as is the ratio of "D" to "L", the MPEP clearly states that "proportions of features in drawings are not evidence of actual proportions when drawings are not to scale". MPEP § 2125. "When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value." MPEP § 2125 (citing *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956, USPQ2d 1487, 1491

Application No. 10/068,788
Amendment "C" Dated December 9, 2004
Reply to Office Action mailed August 12, 2004

(Fed. Cir. 2000)). "[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue." *Id.* Because Green is "completely silent on the issue" of "particular sizes" and "proportions" of the elements pictured in the drawings, the PTO may not rely on Green for the proposition that it discloses any specific fiber length, fiber diameter, length "L", distance "D", or ratio of distance "D" to length "L".

IV. CLAIM 43

Applicant notes that, to date, the PTO has never articulated a rejection of the subject matter recited in claim 43, which combines the elements of original claims 1, 4 and 10. As pointed out in Amendment "A" (p. 15), claim 4 was not rejected over Green and claim 10 was not rejected over Dragan in the first office action. The second and third office actions likewise never articulated any grounds for rejecting claim 43 (pp. 3-4). On this basis, claim 43 is not *prima facie* obvious.

V. CONCLUSION

In view of the foregoing, Applicant submits that the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 10th day of December 2004.

Respectfully submitted,



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